CLAIMS

What is claimed is:

1. Reinforcement for cementitious boards comprising an open mesh of high modulus of elasticity fiber strands continuously covered by alkali-resistant thermoplastic material.

2. The reinforcement of claim 1 wherein said mesh is heated after formation thereof to fuse said thermoplastic material at areas where said strands intersect.

3. The reinforcement of claim 1 wherein said mesh is heated after formation thereof to provide a continuous coating of said thermoplastic material on said strands.

4. The reinforcement of claim 1 wherein said thermoplastic material is selected from the group consisting of olefins, ethylene propylene rubber, thermoplastic polyolefin rubber, polyvinylidene chloride, ethylene-propylene diene monomer and copolymers of polybutylene and propylene.

5. The reinforcement of claim 1 wherein said mesh has a strand count of about 2 to about 18 strands per inch in each direction.

6. The reinforcement of claim 1 wherein said strands comprise bundled glass fibers having a linear density of about 33 to about 300 tex.

7. The reinforcement of claim 1 wherein said mesh is no greater than about 0.020 inch in thickness.

8. The reinforcement of claim 3 wherein said thermoplastic material is fibrous.

9. The reinforcement of claim 8 wherein said fibrous thermoplastic material is friction spun on said strands.

10. The reinforcement of claim 2 wherein said thermoplastic material is co-extruded with said strands to provide a continuous coating about said strands.

11. A substantially planar cementitious board having first and second opposed faces, said cementitious board comprising:

cementitious matrix material; and

reinforcement embedded within said cementitious matrix material, said reinforcement comprising an open mesh of high modulus fiber strands continuously coated with alkali-resistant thermoplastic material.

12. The cementitious board of claim 11 wherein said reinforcement is disposed about 1/16 to about 1/32 inch beneath at least one of said first and second opposed faces.

13. The cementitious board of claim 12 wherein said board is about 1/4 to about 5/8 inch in thickness.

14. A method of making reinforcement for cementitious boards comprising the steps of:

(a) covering high modulus of elasticity fiber strands with alkali-resistant thermoplastic material;

(b) forming an open mesh from said strands; and

(c) heating said mesh.

15. The method of claim 14 wherein said heating step comprises sufficiently heating said mesh to fuse said thermoplastic material at areas where said strands intersect.

16. The method of claim 14 wherein said heating step comprises sufficiently heating said mesh to provide a continuous coating of said thermoplastic material on said strands.

17. The method of claim 14 wherein said mesh is heated after formation thereof to provide a continuous coating of said thermoplastic material on said strands.

18. The method of claim 14 wherein said thermoplastic material is selected from the group consisting of olefins, ethylene propylene rubber, thermoplastic polyolefin rubber, polyvinylidene chloride, ethylene-propylene diene monomer and copolymers of polybutylene and propylene.

19. The method of claim 14 wherein said mesh has a strand count of about 2 to about 18 strands per inch in each direction.

20. The method of claim 14 wherein said strands comprise bundled glass fibers having a linear density of about 33 to about 300 tex.

21. The method of claim 14 wherein said mesh is no greater than about 0.020 inch in thickness.

22. The method of claim 15 wherein said thermoplastic material is fibrous.

23. The method of claim 21 wherein said fibrous thermoplastic material is friction spun on said strands.

24. The method of claim 14 wherein said thermoplastic material is co-extruded with said strands to provide a continuous coating about said strands.

25. A method of making a reinforced cementitious board having first and second faces, said method comprising the steps of:

selecting reinforcement comprising an open mesh of high modulus of elasticity fiber strands continuously covered with alkali resistant material; and

embedding said open mesh material in cementitious matrix material.

26. The method of claim 24 wherein said reinforcement is disposed about 1/16 to about 1/32 inches beneath at least one of said first and second opposed faces.

27. The method of claim 24 wherein said board is about 1/4 to about 5/8 inches in thickness.

28. The method of claim 24 wherein said mesh is heated after formation thereof to provide a continuous coating of said thermoplastic material on said strands.

29. The method of claim 24 wherein said thermoplastic material is selected from the group consisting of olefins, ethylene propylene rubber, thermoplastic polyolefin rubber, polyvinylidene chloride, ethylene-propylene diene monomer, and copolymers of polybutylene and propylene.

30. The method of claim 24 wherein said mesh has a strand count of about 2 to about 18 strands per inch in each direction.

31. The method of claim 24 wherein said strands comprise bundled glass fibers having a linear density of about 33 to about 300 tex.

32. The method of claim 24 wherein said mesh is no greater than about 0.020 inch in thickness.

33. The method of claim 27 wherein said thermoplastic material is fibrous.

34. The method of claim 32 wherein said fibrous thermoplastic material is friction spun on said strands.

35. The method of claim 24 wherein said thermoplastic material is co-extruded with said strands to provide a continuous coating about said strands.